

ACCURATE UTILITY BILLING

Challenge

Impervious surfaces - hard surfaces like concrete and asphalt - don't allow rain water to soak into the ground. That can produce excessive stormwater runoff that fills and overflows city sewers.

Drainage in Indianapolis has always been a problem. Recently, the Stormwater Utility was established to fund construction and maintenance of the City's new stormwater collection system. It was imperative that the Utility begin collecting user fees as quickly as possible, so they turned to GIS for a solution.

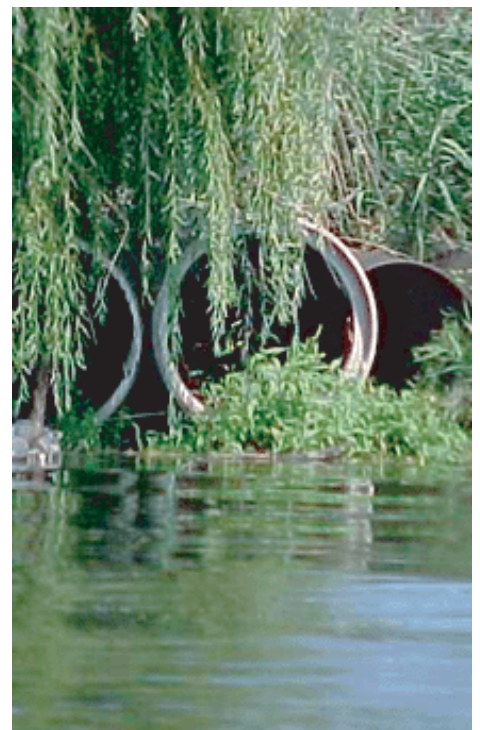
Action

GIS was used to calculate the area of impervious surfaces for over 40,000 non-residential parcels. The project used GIS data - aerial photography, land ownership, and buildings - to visually inspect and catalog all impervious surfaces in Marion County-Indianapolis. After compilation, GIS technology was used to automatically calculate the amount of impervious surface, by type, for each parcel. The impervious surface maps were posted online, and quality control was performed off-site. The completed data was provided to a billing company who performed fee calculations and sent out the bills.

GIS continues to play a vital role as this project moves into the maintenance phase. Using GIS, construction permits are located by address and impervious surfaces of new construction are captured from aerial photos. Occasionally, field work is required, and GIS technology is used on Personal Digital Assistants (PDA).

Results

- GIS allowed the City to quickly set up a fair and equitable revenue source that will generate **\$7 Million - \$8 Million** per year for improving stormwater drainage.
- The project was on a highly accelerated five-month schedule. By using GIS, it was completed **on time and within budget**.



The Indianapolis Stormwater Utility uses GIS for accurate and efficient billing